

Remarks

In response to the election/restriction requirement, applicants confirm the oral election made by the undersigned on February 9, 2006 and elect Group I, claims 1-18 for further prosecution on the merits. Claims 19-22 are canceled without prejudice to filing a divisional application. Claim 23 has been added. Claims 1-18 and 23 will be pending upon entry of this amendment.

Response to Rejection of Claims under 35 USC §102**Claim 1**

Claim 1 is directed to a truss fabrication system. The system includes a truss set-up table (12) including a table deck (52) having a side edge (56). Extension arms (60) project generally horizontally outward from the side edge. The extension arms provide a work surface for placement of truss members. In one example, the work surface is for splicing truss chord members together. The extension arms are spaced apart along the side edge so that the extension arms and table deck define at least one work bay (65) for a worker. With this configuration, a worker standing in the work bay can position truss members (120, 124) and connector plates (122) in, for example, a work zone (21) for splicing truss chord members (120) without reaching over the extension arms or the first work zone. This configuration is illustrated in Figs. 2 and 5.

More specifically, claim 1 is directed to a truss fabrication system for use in fabricating trusses from truss components including truss members and connectors joining the truss members together. The truss fabrication system comprises:

a truss set-up table including a substantially horizontal table deck having a side edge, and extension arms projecting

generally horizontally outward from the side edge, the extension arms being spaced apart from each other along the table deck side edge, the extension arms and table deck side edge defining at least one work bay sized to permit a worker to pass into the work bay to the table deck side edge for manipulating the truss components on the table deck; and

a gantry press movable relative to the truss set-up table, the gantry press being sized and arranged relative to the truss set-up table for pressing connectors into truss members supported on the table deck and for pressing connectors into truss members supported on the extension arms.

Claim 1 is submitted to be unanticipated by and patentable over the references of record, and in particular U.S. Patent Nos. 5,170,558 (Hubbard) and 6,817,090 (McAdoo et al.), in that whether considered alone or in combination, the references fail to show or suggest extension arms projecting generally **horizontally outward** from a side edge of a table deck, where the extension arms are spaced apart from each other along the table deck side edge, and the extension arms and table deck side edge **define at least one work bay** sized to permit a worker to pass into the work bay to the table deck side edge for manipulating the truss components on the table deck.

Hubbard is directed to a truss fabrication system that includes a preliminary truss assembly area (11) and a conveyor area (15). The truss assembly area includes longitudinally spaced tables (12) and receiving skates (22) located between the tables that are pneumatically powered to pop up. The conveyor area (15) is next to the preliminary truss assembly area and includes receiving arms (17) for transferring trusses from the preliminary truss assembly area (11) to the conveyor area (15). There is a space (23) between the assembly and conveyor areas.

Hubbard fails to show or suggest extension arms projecting generally horizontally outward from a side edge of a table deck. The skate rails (22) located between the tables (12) of the preliminary truss assembly area (11) are not extension arms projecting generally horizontally outward from a side edge of a table deck. The skate rails do not extend outward from a **side edge** of the table deck. The Examiner has made response to the action difficult by failing to identify what he considers to be a "side edge" in Hubbard. The preliminary truss assembly area (11), not "table" (12) corresponds to the truss set-up table recited in claim 1 and as described in the present specification. A "side edge" of the preliminary truss assembly area must run lengthwise along the assembly area and cannot include those transverse edges of adjacent tables that define spaces between the tables where the skate rails (22) are located. Thus, the skate rails (22) located between the tables (12) do not extend outward from the side edge of the preliminary truss assembly area (11). As shown in Fig. 8, these rails (22) if anything extend vertically, not horizontally, from the side edge of the truss assembly area (11).

Assuming for the sake of argument only that a transverse edge of the table (12) can be considered a side edge and that the skate rail (22) can be considered an extension arm, Hubbard does not teach or suggest that the skate railss are spaced apart from each other along the transverse edge of the table. Instead, Hubbard only teaches **one** skate rail (22) per transverse side edge of the table (12). Consequently, Hubbard also does not teach or suggest at least one work bay defined by skate railss and the transverse edge of the table that is sized to permit a worker to pass into the work bay to the table deck side edge for manipulating the truss components on the table deck. In fact, Hubbard does not teach a work bay at all granting a worker access to the transverse edge of the table (12).

Still further, these transverse edges in no way define a work bay. No worker could fit between the tables (12). These edges run perpendicular to the space (23) said to be the work bay. Documentation in support of the position that a line running perpendicular to but not projecting into a space can define a space is requested. Moreover, a "work bay" cannot be defined by a single edge. The word "bay" is used in the sense of a "compartment", requiring enclosure on three sides similar to a bay window. Hubbard's tables (12) have no structure projecting horizontally from a side edge.

McAdoo et al. disclose a table (12) including table plates (18a-18j). Jigs (54) extend upward from the table plates. McAdoo et al. fail to show or suggest extension arms projecting generally **horizontally** outward from a **side edge** of a table deck. The jigs (54) are not properly considered extension arms, the jigs do not project generally horizontally outward from a side edge of the table plates (18a-18j). Instead, the jigs (54) project upward (i.e., vertically) from the table plates (18a-18j). Moreover, the jigs project somewhat adjacent the edges of the plates but do not project **from** the side edge. Consequently, McAdoo et al. also do not teach or suggest at least one work bay defined by the jigs (54) and the side edge of the table (12) that is sized to permit a worker to pass into the work bay to the table deck side edge for manipulating the truss components on the table deck. There is only a small gap between adjacent jigs, which surely is not sized to permit a worker to pass into it.

The other references of record similarly fail to show or suggest all of the elements of claim 1.

For these reasons, claim 1 is submitted to be unanticipated by and patentable over the references of record.

Claims 2-18 and 23 depend either directly or indirectly from claim 1 and are submitted to be patentable for at least the same reasons as claim 1.

Claim 2

Claim 2 depends from claim 1 and requires in part that the gantry press connectors into truss members supported on the table deck and into truss members supported on the extension arms at the same time. As previously stated for claim 1, none of the references of record show or suggest extension arms projecting generally **horizontally outward** from the side edge of the truss table. The parts in the prior art identified by the Examiner as extension arms are not arranged to or capable of supporting truss members as connector plates are supported on the extension arms. Therefore, the references cannot show or suggest truss members supported by the extension arms and cannot show or suggest the gantry simultaneously pressing connectors into truss members supported on the table deck **and extension arms**. For this additional reason, claim 2 is unanticipated and patentable over the references of record.

Claim 7

Claim 7 depends indirectly from claim 1 and requires in part that one side of the gantry include a spacer connected to one of the guide wheels. The spacer is arranged to extend under the extension arms of the truss table to position the guide wheel in a guide for guiding movement of the gantry along the table. None of the references of record, including McAdoo et al., show or suggest a spacer. In McAdoo et al., for example, wheel shafts connect guide wheels to the gantry; the guide wheels then fit in gantry tracks for guiding movement of the gantry along a truss table. The wheel shafts, however, are not arranged to extend under extension

arms projecting generally horizontally outward from the side edge of the truss table. For sake of argument, even if the jigs (54) are considered extension arms as stated in the Office action (page 10, paragraph 2), the wheel shafts still do not extend under any of the jigs. The wheel shafts only extend as far as the gantry tracks (38), which are outside of the jigs. See Figs. 1 and 4. For this additional reason, claim 7 is unanticipated and patentable over the references of record.

Claim 8

Claim 8 depends from claim 1 and requires in part that the extension arms define a first work zone and the table deck define a second work zone. Each work zone is configured to hold connectors and truss members in position for the gantry press to press the connectors into the truss members in each zone at the same time. None of the references of record show or suggest these features. For example, McAdoo et al. divides the truss table (12) into three zones (A, B, and C) separated by clamping assemblies (50) (McAdoo et al., Figs. 1-3). The Office action identifies zone B as a first work zone, being defined by outer jigs (54) (page 10, paragraph 3). However, the language of claim 8 also requires the first work zone hold connectors and truss members in position for the gantry to press the connectors into the truss members. Zone B of McAdoo et al. does not hold connectors and truss members in this position; zone B is instead an intermediate zone between assembly zones A and C that merely provides room for gears to move inner jigs (52) to control the size of zones A and C. In Hubbard, the Office action identifies first and second side-by-side tables (12) as first and second work zones (page 6, paragraph 2). However, the language of claim 8 requires the extension arms act as the first work zone (i.e., the extension arms define a first work zone) and the table deck act as the second work zone (i.e., the table deck defines a

second work zone). The table deck does not define both first and second work zones, as would be required by the Office action. For these additional reasons, claim 8 is submitted as unanticipated and patentable over the references of record, including McAdoo et al. and Hubbard.

Claims 9 and 10

Claim 9 depends from claim 8 and requires in part that the table deck further comprise a third work zone configured to hold connectors and truss members in position for the gantry press to press the connectors into the truss members at the same time as connectors are pressed into truss members in the first and second work zones. Claim 10 depends from claim 9 and further requires, in part, that the first, second, and third work zones be configured to assemble trusses in stages. The first work zone is configured to splice certain truss members together (e.g., chord members), the second work zone to press connectors on a first side of the truss to connect truss members, and the third work zone to press connectors on a second side of the truss into the truss members. The references of record, including McAdoo et al., do not show three work zones in each of which connectors are pressed into truss members by the gantry press at the same time. In McAdoo et al., for example, the gantry press can only press connectors into truss members in two zones, zones A and C. As previously stated for claim 8, zone B does not support truss members and connectors in position for the gantry press to press the connectors into the truss members. Furthermore, the references of record do not show the work zones configured to assemble trusses in stages. For example, McAdoo et al. does not show a specific zone for splicing certain truss members together (i.e., the first zone as required by claim 10). For these additional reasons, claims 9 and 10 are

submitted as unanticipated and patentable over the references of record, including McAdoo et al.

Claim 17

Claim 17 depends from claim 1 and requires the extension arms define multiple work bays along the table deck side edge. For the reasons previously stated for claim 1, the references of record, including Hubbard, fail to show or suggest multiple work bays. Therefore, claim 17 is submitted as unanticipated and patentable over the references of record, including Hubbard, for this additional reason.

Claim 18

Claim 18 depends from claim 1 and requires the gantry press have a bearing surface engagable with a surface of an extension arm to support the extension arm as the gantry press presses connectors into truss members supported on the extension arm. In this claim, the bearing surface supports the extension arm against the downward forces applied to the extension arm by the gantry press as the press passes over truss members supported on the extension arm. This feature is not shown or suggested in the references of record, including Hubbard. The Office action states (page 8, paragraph 1) that the gantry press in Hubbard comprises a bearing surface (the outside periphery of the gantry roller) engagable with an extension arm (skate rail 22) to support the extension arm as the gantry presses connectors into truss members. But in Hubbard the gantry roller moves over the top of the truss and at no time positions itself to support the skate rails against downward pressure applied by the gantry roller. For this additional reason, claim 18 is submitted as unanticipated and patentable over the references of record, including Hubbard.

Comments Regarding New Claim 23

New claim 23 depends from claim 1 and requires the extension arms be fixed to the truss set-up table in a position projecting horizontally outward from the side edge of the table deck. Neither McAdoo et al. nor Hubbard nor any other reference of record show fixed extension arms. In fact, in McAdoo et al. and Hubbard, as interpreted in the Office action, the extension arms (jigs (54) in McAdoo et al. and skate rails (22) in Hubbard) are movable, not fixed. New claim 23 is submitted as patentable over the references of record, including McAdoo et al. and Hubbard.

Conclusion

In view of the foregoing, favorable consideration and allowance of claims 1-18 and 23 are respectfully requested.

Respectfully submitted,



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